Cloud Storage

Overview

Cloud Storage is a service where data is remotely maintained, managed, and backed up. The service is available to users over a network, which is usually the internet. It allows the user to store files online so that the user can access them from any location via the internet. The provider company makes them available to the user online by keeping the uploaded files on an external server. This gives companies using cloud storage services ease and convenience, but can potentially be costly. Users should also be aware that backing up their data is still required when using cloud storage services, because recovering data from cloud storage is much slower than local backup.

Common Features of Cloud Storage Options

Many of these services are free up to a certain number of gigabytes, with additional storage available for a monthly fee. All cloud storage services provide drag-and-drop accessing and syncing of folders and files between your desktop and mobile devices, and the cloud drive. They also all allow account users to collaborate with each other on documents.

Popular Cloud Storage Options

Dropbox
https://www.dropbox.com/features

- **Collaboration:** Dropbox gives users the capability of sharing entire folders with other Dropbox account users, which allows updates to be viewable by all collaborators. Users can download shared documents directly from Dropbox's web interface without having to install the Dropbox desktop client. Storing files in the Dropbox "Public" folder allows links to files to be sent to Dropbox and non-Dropbox users; however non-Dropbox link recipients must download the file to access/edit it, and any changes or revisions made to the file by the link-recipients will not be reflected in the Dropbox version of the file.
- **Mobile App Support:** Documents are easily accessible through phone and tablets using the Dropbox mobile app.
- **Storage:** Dropbox offers 2GB of free storage.
- **Strengths:** Primarily in its ease of use. Very intuitive interface—for example, sharing folders is available by simply right-clicking the file or folder on the desktop, and choosing Sharing. You can also determine how fast files are synced in Preferences (right-clicking the Dropbox icon). You can also recover deleted files in Dropbox easier than some other options.
- **Weaknesses:** Lowest amount of free storage of the offerings reviewed in this document. Also, when inviting users to share files/folders, the email invitation must be sent to the email address that is associated with the users' Dropbox account.

Google Drive

https://www.google.com/intl/en_US/drive/start/index.html

- **Collaboration:** Users of Google Drive documents must have a Google Drive account.   All updates and editing by collaborators will be synced to Google Drive. For documents that you have permission to access, you can receive notifications when changes are made. You can share files with people by sending them a link to your file.
- **Mobile App Support:** Google Drive has an Android app which gives you the ability to share the files on your Android device using your Drive account. You can also share any file from Drive with your phone contacts.
- **Storage:** Google Drive offers 5GB of free storage.
- **Strengths:** Has built-in document editor so that programs such as Microsoft Word are not required to be installed on computer in order to edit document. Allows comments to be left on any files stored.
- **Weaknesses:** Sharing not as easy and intuitive as Dropbox—must use the Google Drive web application to set it up. Also no ability to set preferences on syncing speed.

Microsoft SkyDrive

https://windows.microsoft.com/en-US/skydrive/download

- **Collaboration:** Colleagues can access SkyDrive files without having to sign up for a SkyDrive account. You can also update documents simultaneously online with colleagues.
- **Mobile App Support:** SkyDrive offers both a Window's phone app and an iOS (iPhone/iPad) app. This allows users to view and share as well as edit and update files via phone or tablet. SkyDrive files can also be opened using third party iOS apps, such as Pages and Keynote.
- **Storage:** SkyDrive offers 7GB of free space.
- **Strengths:** Offers the most storage for free of the options reviewed in this document. Like Google Drive, you can edit documents within the browser, without having to open up a client application like Microsoft Word.
- **Weaknesses:** – Skydrive is somewhat less user friendly than Dropbox and Google Drive.

Box

https://box.com

- **Collaboration:** You can share content with both colleagues that do have Box accounts, and those who don't. Like Dropbox, you can create a shared folder and invite Box account colleagues for ongoing sharing. You can receive email notifications when files are uploaded, downloaded, or added. You can also set passwords for important files and set time limits for user access to certain files. You have more control over user access to files and documents because security levels can be defined. Box is geared more towards businesses and enterprises, but it is also available for personal use.
- **Mobile App Support:** Users can view, edit, create and share content on-the-go. You can find files fast with built-in search. It allows you to save files you create or edit in other apps to your Box account. You can also upload files from your phone or tablet to Box as well as save files from Box onto your mobile device for offline access.
- **Storage:** Box offers 5 GB of free storage.
- **Strengths:** You can store larger file sizes. Box is organized and user friendly, you can create and organize several layers of folders for all of your documents and data. You can use tagging as a way to keep track of your folders and files. Tags allow you to mark and sort related files that may not be located in the same section of your Box. Box offers the highest security options. Content management tools.
- **Weaknesses:** Box doesn't do file-syncing from the computer to box.com as simply as other services do. There is a desktop component called Box Sync, but it's available only to Business and Enterprise account holders for a fee.

Advantages of Cloud Storage

- **Usability** – All cloud storage services reviewed in this topic have desktop folders for Mac's and PC's. This allows users to drag and drop files between the cloud storage and their local storage.
- **Bandwidth** – You can avoid emailing files to individuals and instead send a web link to recipients through your email.
- **Accessibility** – Stored files can be accessed from anywhere via Internet connection.
- **Disaster Recovery** – It is highly recommended that businesses have an emergency back-up plan ready in the case of an emergency. Cloud storage can be used as a back-up plan by businesses by providing a second copy of important files. These files are stored at a remote location and can be accessed through an internet connection.
- **Cost Savings** – Businesses and organizations can often reduce annual operating costs by using cloud storage; cloud storage costs about 3 cents per gigabyte to store data internally.   Users can see additional cost savings because it does not require internal power to store information remotely.

Disadvantages of Cloud Storage

- **Usability** – Be careful when using drag/drop to move a document into the cloud storage folder. This will permanently move your document from its original folder to the cloud storage location. Do a copy and paste instead of drag/drop if you want to retain the document's original location in addition to moving a copy onto the cloud storage folder.
- **Bandwidth** – Several cloud storage services have a specific bandwidth allowance. If an organization surpasses the given allowance, the additional charges could be significant. However, some providers allow unlimited bandwidth. This is a factor that companies should consider when looking at a cloud storage provider.
- **Accessibility –** If you have no internet connection, you have no access to your data.
- **Data Security** – There are concerns with the safety and privacy of important data stored remotely. The possibility of private data commingling with other organizations makes some businesses uneasy.
- **Software –** If you want to be able to manipulate your files locally through multiple devices, you'll need to download the service on all devices.

Summary

Although there are downsides to cloud storage, many organizations believe the benefits to far outweigh the risks. The cost savings, disaster-recovery, security, and accessibility are just a few intriguing benefits to businesses. Cloud storage can reduce costs, simplify IT management, improve user experience, and allow employees to work and collaborate from remote locations. This simplifies sharing and collaboration among staff, and easing IT logistics as a whole.